

an additive in a concentration from about 4 wt% to about 15 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and

a compatibilizer/emulsifier/surfactant (CES) in a concentration from about 0.1 wt% to less than 4 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, ethylhexylacrylate, and mixtures thereof;

wherein said composition maintains dimensional stability during extended periods at 212°F in the absence of reinforcing fillers.

REMARKS

Claims 1-26 are pending. By the foregoing amendment, claims 1, 20, and 21 have been amended and new claims 23-26 have been added. Independent claims 1, 20, and 21 have been amended to point out that the respective thermoplastic compositions maintain dimensional stability at 250°F. New claims 23-25 depend from claims 1, 20, and 21, respectively, and point out that the degree of thermal crystallization of the respective compositions is at least about 20%. New independent claim 26 is directed to a food-grade composition which maintains dimensional stability at 212°F in the absence of reinforcing fillers. Support for the amendments is found throughout the specification, e.g., at page 3, lines 12-15 (¶9) and page 9, lines 1-9 (¶28) (microwave-ovenable containers maintain dimensional stability at temperatures (up to 212°F) the container is subjected to in microwave ovens). No new matter is added.

As demonstrated in the accompanying declaration of Hasmukh Patel, injection molded thermoplastic compositions prepared as described in EP 0 838 501 A2, are virtually amorphous and, therefore, do not have a degree of thermally induced crystallinity of at least about 15% (Patel dec. ¶7). Moreover, these injection molded compositions exhibit shrinkage (do not maintain dimensional stability) at 212°F in the absence of reinforcing fillers (Patel dec. ¶9). In addition, these injection molded compositions exhibit heat distortion (do not maintain dimensional stability) at temperatures of 250-400°F, e.g., temperatures typically encountered in cooking applications, with or without reinforcing fillers (Patel dec. ¶10).

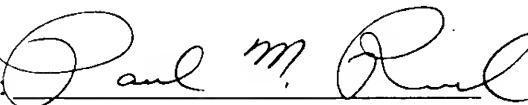
The Patel declaration amply demonstrates that the injection molded compositions described in the cited EP '501 document do not anticipate or even remotely suggest the thermoplastic compositions as claimed in claims 1-26.

A Notice of Allowance is respectfully requested. The Examiner is invited to telephone the undersigned at the number listed below if she believes doing so would be helpful to resolve any outstanding matters.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Date: November 19, 2002

By: 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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1. (amended) A thermally crystallized thermoplastic polymeric composition having a degree of thermally induced crystallinity of at least about 15%, said composition comprising:

a bulk polymer selected from the group consisting of PET, PEN, PETG, PCT, PCTA, PTT, and mixtures thereof, said bulk polymer optionally comprising up to about 10 wt% of a polyethylene based on the total weight of the bulk polymer;

an additive in a concentration from about 4 wt% to about 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and

a compatibilizer/emulsifier/surfactant (CES) in a concentration from about 0.1 wt% to about 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, ethylhexylmethacrylate, and mixtures thereof;

wherein said composition maintains dimensional stability during extended periods at 250°F.

20. (amended) A food-grade thermoplastic polymeric composition having a degree of thermally induced crystallinity of at least about 15%, said composition comprising:

a bulk polymer selected from the group consisting of PET, PEN, PETG, PCT, PCTA, PTT, and mixtures thereof, said bulk polymer optionally comprising up to about 10 wt% of a polyethylene based on the total weight of the bulk polymer;

an additive in a concentration from about 4 wt% to about 15 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and

a compatibilizer/emulsifier/surfactant (CES) in a concentration from about 0.1 wt% to less than 4 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, ethylhexylacrylate, and mixtures thereof;

wherein said composition maintains dimensional stability during extended periods at 250°F.

21. (amended) A layered thermoplastic polymeric composition comprising:

(a) a first thermoplastic polymeric layer having a degree of thermally induced crystallinity of at least about 15%, said first layer comprising:

- (i) a bulk polymer selected from the group consisting of PET, PEN, PETG, PCT, PCTA, PTT, and mixtures thereof, said bulk polymer optionally comprising up to about 10 wt% of a polyethylene based on the total weight of the bulk polymer;
- (ii) an additive in a concentration from about 4 wt% to about 40 wt%, based on a total weight of the composition, comprising a substantially amorphous co-polymer of ethylene and an acrylate; and
- (iii) a compatibilizer/emulsifier/surfactant (CES) in a concentration from about 0.1 wt% to about 8 wt%, based on the total weight of the composition, comprising a grafted or backbone co-polymer or ter-polymer of ethylene and a glycidyl acrylate or maleic anhydride, and optionally an acrylate selected from the group consisting of methylacrylate, ethylacrylate, propylacrylate, butylacrylate, ethylhexyl methacrylate, and mixtures thereof; and

(b) a second polymeric layer laminated to or co-extruded onto the first layer;

wherein said layered composition maintains dimensional stability during extended periods at 250°F.